

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

UNITED STATES OF AMERICA

v.

RAYNALDO RIVERA ORTIZ, JR.

CASE NO. 3:22-CR-378-N

GOVERNMENT'S DISCLOSURE OF EXPERT WITNESSES

The United States of America (the government) notifies the Court and the defendant, pursuant to Federal Rule of Criminal Procedure 16(a)(1)(G), that it intends to present expert testimony from individuals listed in this document. The government does not believe that all are "experts" in that many issues about which they will and may testify is covered under Federal Rule of Evidence 701, which governs opinion testimony of lay witnesses. Out of an abundance of caution, however, the government provides the following notice of witnesses providing testimony that may fall under Federal Rule of Evidence 702.

The following are forensic toxicology specialists who will be called to testify as potential expert witnesses. Each will testify that he or she took a human sample (e.g., blood) and analyzed it to determine the presence of any drugs (legal and illegal) and utilized tests and techniques relied on by other experts in the same field; one reviewed the work of others, to validate and confirm the results reached by them. Each is a college graduate in a scientific field and has received advance training in relevant areas and topics. Each has formed opinions based on his/her experience and training regarding tests and analyses they performed.

Megan Savage
Southwestern Institute of Forensic Sciences
2355 N. Stemmons Freeway
Dallas, Texas 75207
(214) 920-5900

Ms. Savage is a Toxicology Chemist II employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since 2015. Before coming to SWIFS, she was employed as a Toxicology Technician at the Harris County Institute of Forensic Sciences. Ms. Savage obtained a bachelor's degree in forensic chemistry from Sam Houston State University (SHSU) in 2012, as well as a master's degree in forensic chemistry from SHSU in 2014. She currently holds a license in toxicology (general, non-interpretive) from the Texas Forensic Science Commission and has held that license since 2018. Ms. Savage is a member of the Society of Forensic Toxicologists (SOFT) and the Southwestern Association of Toxicologists. She collaborated with others on an article published in the *Journal of Analytical Toxicology* in 2015. Since 2014, she has regularly pursued and completed continuing education in her field, including attending courses and webinars conducted by the SOFT, the Center for Forensic Science Research and Education (CFSRE), NMS Laboratories, the Texas Forensic Science Commission, Chromatography Online, and RTI International's Center for Forensic Sciences, as well as reviewing articles published by scholarly journals such as the *Journal of Analytical Toxicology*.

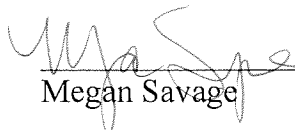
Ms. Savage will testify about her involvement as a Toxicology Chemist II in the SWIFS testing of femoral blood recovered during the autopsy of M.K., who died on June 21, 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Savage will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 005-003 received by SWIFS in case no. IFS-22-12341-0004). Specifically, Ms. Savage will testify that on July 7, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on the sample, per the Standard Operating Procedures in effect at that time (including revision 18, SOP 4861-QTOF Drug Screen, and revisions 15, 16, and 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Savage will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data, bupivacaine was found to be present in the sample. Ms. Savage will testify that, during the span of these procedures, quality assurance protocols were rigorously observed, including regular assessment of quality

controls and calibration. Ms. Savage's involvement in the testing procedures is documented in the SWIFS Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case no. IFS-22-12341-0004.

Ms. Savage has not testified as an expert witness at any trial or depositions in the last four years, but has testified as a fact witness in the last four years:

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|------------|--------------|--------------|----------|-------|-----------------|----------|--------|
| 3/30/2022 | IFS-19-08060 | Fact Witness | Criminal | State | Talyie Meadards | DC 195th | Dallas |
| 11/17/2022 | IFS-21-08983 | Fact Witness | Criminal | State | Jordan Mathew | DC CCC#5 | Dallas |

Her curriculum vitae has been attached to this filing as Exhibit A. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Savage has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, her role in the testing of blood by SWIFS personnel using high resolution mass spectrometry and the results of that testing.


Megan Savage

Darya Vassilieva
Southwestern Institute of Forensic Sciences
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(214) 920-5900

Ms. Vassilieva is a Forensic Toxicologist II employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since December 2013. Before coming to SWIFS, she was employed as a Medical Technologist at Quest Diagnostics New York City/New Jersey unit. Ms. Vassilieva obtained a bachelor's degree in forensic toxicology from John Jay College of Criminal Justice in 2009. She currently holds a license as a toxicologist (general, non-interpretive) from the Texas Forensic Science Commission and has held that license since December 2018. Since 2013, she has regularly pursued and completed continuing education in her field, including attending courses and webinars conducted by the Society of Forensic Toxicologists (SOFT), the International Alliance of Clinical and Forensic Toxicologists (IACFT), and RTI International's Center for Forensic Sciences, as well as reviewing articles published by scholarly journals such as the *Journal of Analytical Toxicology*.

Ms. Vassilieva will testify about her involvement as a Forensic Toxicologist II in the SWIFS testing of femoral blood recovered during the autopsy of M.K., who died on June 21, 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout


processing. Ms. Vassilieva will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 005-002 received by SWIFS in case no. IFS-22-12341-0004). Specifically, Ms. Vassilieva will testify that on July 13, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on the sample, per the Standard Operating Procedures in effect at that time (including revision 18, SOP 4861-QTOF Drug Screen, and revisions 15, 16, and 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Vassilieva will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data, bupivacaine was found to be present in the sample. Ms. Vassilieva will testify that, during the span of these procedures, quality assurance protocols were rigorously observed, including regular assessment of quality controls and calibration.

Ms. Vassilieva's involvement in the testing procedures is documented in the Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case no. IFS-22-12341-0004.

Ms. Vassilieva has not testified as an expert witness at any trial or depositions in the last four years, but has testified as a fact witness in the last four years:

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| 9/30/2021 | IFS-17-05119 | Fact Witness | Criminal | State | David Patrick Gray | CCC2 | Dallas |
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Her curriculum vitae has been attached to this filing as Exhibit B. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Vassilieva has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, her role in the testing of blood by SWIFS personnel using high resolution mass spectrometry and the results of that testing.



Darya Vassilieva

Liza Chacko
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Ms. Chacko is a Toxicology Chemist II employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since May 2019. Before coming to SWIFS, she was employed as a Certifying Scientist at Reference Health Labs; a Certifying Scientist at Comprehensive Lab Services; a Lab Technologist R&D/CODIS at Cellmark Forensics; and Lab Support Specialist II at NMS Labs. Ms. Chacko obtained a bachelor's degree in biotechnology from VIT University in 2006 and a master's degree in forensic science from Arcadia University in 2008. She currently holds a license as a toxicology analyst (general, non-interpretive) from the Texas Forensic Science Commission and has held that license since 2019. Ms. Chacko is a member of the Southwestern Association of Toxicologists and has been since 2021. Ms. Chacko has regularly pursued and completed continuing education in her field, including attending courses and webinars conducted by the Society of Forensic Toxicologists (SOFT), Center for Forensic Science Research and Education (CFSRE), the Texas Forensic Science Commission (TFSC), NMS Labs, and LCGC International, as well as reviewing articles published by scholarly journals such as the *Journal of Analytical Toxicology*.

Ms. Chacko will testify about her involvement as a Toxicology Chemist II in the SWIFS testing of blood recovered from K.P. and received by SWIFS for

testing in August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Chacko will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 001-001 received by SWIFS in case no. IFS-22-17336-0001). Specifically, Ms. Chacko will testify that on September 8, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on the sample, per the Standard Operating Procedures in effect at that time (including revision 20, SOP 4861-QTOF Drug Screen, and revision 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Chacko will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data, O-desmethyiltramadol, ephedrine, ondansetron, tramadol, lidocaine, gabapentin, and bupivacaine were present in the sample. Ms. Chacko will testify that, during the span of these procedures, quality assurance protocols were rigorously observed, including regular assessment of quality controls and calibration.

Additionally, Ms. Chacko will testify about her involvement as a Toxicology Chemist II in the SWIFS testing of blood recovered from J.A. and received by SWIFS for testing in August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Chacko will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 001-009 received by SWIFS in case no. IFS-22-17256-0001). Specifically, Ms. Chacko will testify that on September 8, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on the sample, per the Standard Operating Procedures in effect at that time (including revision 20, SOP 4861-QTOF Drug Screen, and revision 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Chacko will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data, lidocaine and ephedrine were present in the sample. Ms. Chacko will testify that, during the

span of these procedures, quality assurance protocols were rigorously observed, including regular assessment of quality controls and calibration.

Ms. Chacko's involvement in the testing procedures is documented in the Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case nos. IFS-22-17256-0001 and IFS-22-17336-0001.

Ms. Chacko has not testified as an expert at any trials or depositions in the last four years, but has testified as a fact witness in the last four years:

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| 4/18/2023 | IFS-21-24517 | Fact Witness | Criminal | State | Lakietle Evette Davis | CCC#11 | Dallas |
|-----------|--------------|--------------|----------|-------|-----------------------|--------|--------|

Her curriculum vitae has been attached to this filing as Exhibit C. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Chacko has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, her role in the testing of blood by SWIFS personnel using high resolution mass spectrometry and the results of that testing.


 Liza Chacko

Heidi Christensen
Southwestern Institute of Forensic Sciences
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(214) 920-5900

Ms. Christensen is a Toxicology Chemist III employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since July 2014. From April 2005 to July 2014, she was employed as a Toxicology Chemist II at SWIFS. Before coming to SWIFS, she was employed as a Research Technician II at the Retina Foundation of the Southwest. Ms. Christensen obtained a bachelor's degree in molecular biology from the University of Texas at Dallas in 2003. She currently holds a license as a toxicologist (interpretive) from the Texas Forensic Science Commission and has held that license since December 2018. Ms. Christensen is a member of the Southwestern Association of Toxicologists (SAT) and has been since 2012. She is also a member of the Society of Forensic Toxicologists and has been since 2016. In 2012, Ms. Christensen was awarded a SAT meeting grant, and in 2016 she was given a regional award by the American Academy of Forensic Sciences. Since 2005, Ms. Christensen has regularly pursued and completed continuing education in her field, including attending courses and webinars conducted by the SAT, the Society of Forensic Toxicologists (SOFT), the Traffic Safety Resource Program, and the Center for Forensic Science Research and Education (CFSRE), as well as reviewing articles published by scholarly journals such as the *Journal of Analytical Toxicology*.

Ms. Christensen will testify about her involvement as a Toxicology Chemist III in the SWIFS testing of blood recovered from K.P. and received by SWIFS for testing in August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Christensen will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 001-001 received by SWIFS in case no. IFS-22-17336-0001). Specifically, Ms. Christensen will testify that on September 9, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on it, per the Standard Operating Procedures in effect at that time (including revision 20, SOP 4861-QTOF Drug Screen, and revision 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Christensen will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data, O-desmethyltramadol, ephedrine, ondansetron, tramadol, lidocaine, gabapentin, and bupivacaine were present in the sample. Ms. Christensen will testify that, during the span of these procedures, quality assurance

protocols were rigorously observed, including regular assessment of quality controls and calibration.

Additionally, Ms. Christensen will testify about her involvement as a Toxicology Chemist III in the SWIFS testing of blood recovered from J.A. and received by SWIFS for testing in August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Christensen will testify that she conducted certain parts of the forensic toxicology analysis performed on the blood sample (item no. 001-009 received by SWIFS in case no. IFS-22-17256-0001). Specifically, Ms. Christensen will testify that on September 9, 2022 she retrieved the tube containing the blood sample from storage, extracted a sample for testing, and then conducted a LC-QTOF-MS/MS drug screening procedure on it, per the Standard Operating Procedures in effect at that time (including revision 20, SOP 4861-QTOF Drug Screen, and revision 17, SOP 4864-Toxicology Administrative Procedures). She will testify that the testing process involved a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. Ms. Christensen will testify that the testing instrumentation and procedure produced digital data concerning the sample (as part of a batch of samples); she then collected, collated, and preserved the data for review by another toxicologist. She will testify that, according to the data,

lidocaine and ephedrine were present in the sample. Ms. Christensen will testify that, during the span of these procedures, quality assurance protocols were rigorously observed, including regular assessment of quality controls and calibration.

Ms. Christensen's involvement in the testing procedures is documented in the Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case nos. IFS-22-17256-0001 and IFS-22-17336-0001.

Ms. Christensen has testified as an expert at trials in the last four years; a list of the trials is attached as Exhibit H. Her curriculum vitae has been attached to this filing as Exhibit D. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Christensen has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, her role in the testing of blood by SWIFS personnel using high resolution mass spectrometry and the results of that testing.



Heidi Christensen

David Baxter
Southwestern Institute of Forensic Sciences
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(214) 920-5900

Mr. Baxter is a Toxicologist II employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since June 2017. Prior to his employment at SWIFS, he was employed as a Certifying Scientist at Next Health and as graduate student at the University of North Texas. Mr. Baxter obtained a bachelor's degree in biology from the University of North Texas in 2005. He currently holds a license in toxicology (non-interpretive) from the Texas Forensic Science Commission and has held that license since December 2018. From 2010 to 2015, Mr. Baxter was a member of the Society of Environmental Toxicology and Chemistry. Mr. Baxter's research, in collaboration with others, has been published in several scholarly journals, as noted in his curriculum vitae. He has made presentations and conference posters for various scientific gatherings, as noted in his curriculum vitae. Since at least 2017, Mr. Baxter has regularly pursued and completed continuing education in his field, including attending courses and webinars conducted by the Texas Forensic Science Commission, the Society of Forensic Toxicologists (SOFT), RTI International's Center for Forensic Sciences, the Society of American Toxicologists, and the Center for Forensic Science Research and Education (CFSRE).

Mr. Baxter will testify about his involvement as a Toxicologist II in the SWIFS testing of blood recovered from K.P. and received by SWIFS for testing in

August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Mr. Baxter will testify that he, on September 12, 2022 and following the forensic toxicology analysis of the blood in a sample (item no. 001-001 received by SWIFS in case no. IFS-22-17336-0001), removed 1.0 ml of blood (an aliquot) from the tube (pink top) three times, transferred the aliquots to other tubes (clear top), packaged the clear top tubes for transport, and released them, for the purposes of the aliquots' transport for further testing at an external laboratory for lidocaine, bupivacaine, and ephedrine. These actions were completed per the Standard Operating Procedures in effect at that time (including revision 12, SOP 4860-Laboratory Referrals, and revision 17, SOP 4864-Toxicology Administrative Procedures). Mr. Baxter will testify that, during the span of these procedures, quality assurance protocols were rigorously observed.

Additionally, Mr. Baxter will testify about his involvement as a Toxicologist II in the SWIFS testing of blood recovered from J.A. and received by SWIFS for testing in August 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Mr. Baxter will testify that he, on September 12, 2022 and following the forensic

toxicology analysis of the blood in a sample (item no. 001-009 received by SWIFS in case no. IFS-22-17256-0001), removed 1.0 ml of blood (an aliquot) from the tube (purple top) two times, transferred the aliquots to other tubes (clear top), packaged the clear top tubes for transport, and released them, for the purposes of the aliquots' transport for further testing at an external laboratory for lidocaine and ephedrine. These actions were completed per the Standard Operating Procedures in effect at that time (including revision 12, SOP 4860-Laboratory Referrals, and revision 17, SOP 4864-Toxicology Administrative Procedures). Mr. Baxter will testify that, during the span of these procedures, quality assurance protocols were rigorously observed.

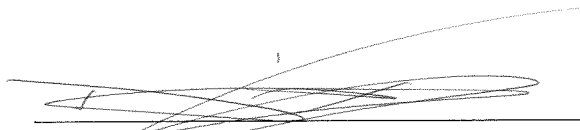
Mr. Baxter's involvement in the testing procedures is documented in the Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case nos. IFS-22-17256-0001 and IFS-22-17336-001.

Mr. Baxter has not testified as an expert at any trials or depositions in the last four years, but has testified as a fact witness in the last four years:

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| 8/22/2022 | IFS-18-20626 | Fact Witness | Criminal | State | Tristan Keir Edwards | 239th | Brazoria | Texas |
| 6/7/2023 | IFS-22-05005 | Fact Witness | Criminal | State | Matthew Flaskrud | 9th Judicial District Court | Montgomery | Texas |

His curriculum vitae has been attached to this filing as Exhibit E. The government expects to demonstrate, by virtue of his education, continuing training, and experience, that Mr. Baxter has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood.

Fed. R. Evid. 702(a). Further, the government expects to show that his specialized knowledge and skill will help the trier of fact understand the evidence—here, his role in the preparation of blood samples for release from SWIFS.



David Baxter

Amanda Rausch (Mohs)
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(214) 920-5900

Ms. Rausch is a Toxicology Chemist II employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since June 2015. Prior to her employment at SWIFS, she obtained an undergraduate degree in chemistry from Hamline University in Minnesota in 2012, a certificate in forensic science from Hamline University in 2013, and a master's degree in forensic science from Virginia Commonwealth University in Richmond, Virginia in 2015. She currently holds a certification as a Diplomate in Forensic Toxicology from the American Board of Forensic Toxicology and has since 2019. Since 2018, she has been licensed as a forensic analyst - toxicology (non-interpretive) from the Texas Forensic Science Commission. Ms. Rausch is a member of the International Association of Forensic Toxicologists and has been since 2021. She is a member of the Southwestern Association of Toxicologists and has been since 2020. Additionally, she is a member of the Society of Forensic Toxicologists and has been since 2015. In the past, she has been a member of the American Academy of Forensic Sciences and the American Chemical Society. Ms. Rausch's research, in collaboration with others, has been published in the *Journal of Analytical Toxicology*, as noted in her curriculum vitae. She has made presentations at and conference posters for various forensic science meetings/gatherings, as noted in her curriculum vitae. Since at least 2015, Ms. Rausch has regularly pursued and

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completed continuing education in her field, including attending courses and webinars conducted by Chromatography Online, the Texas Forensic Science Commission, the Society of Forensic Toxicologists (SOFT), RTI International's Center for Forensic Sciences, the Society of American Toxicologists, and the Center for Forensic Science Research and Education (CFSRE), as well as reviewing articles in *Journal of Analytical Toxicology*.

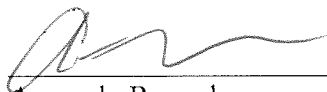
Ms. Rausch will testify about her involvement as a Toxicology Chemist II in the SWIFS testing of femoral blood recovered during the autopsy of M.K., who died on June 21, 2022. The blood was contained in a tube labeled with a unique barcode generated by the Laboratory Information Management System (LIMS). The barcode was used to track chain of custody throughout the examination process and for quality assurance purposes throughout processing. Ms. Rausch will testify that she, following the forensic toxicology analysis of the blood in a sample (item no. 005-001 received by SWIFS in case no. IFS-22-12341-0004), removed 1.0 ml of blood (an aliquot) from the tube (gray top), transferred it to another tube (clear top) on July 27, 2022, packaged the clear top tube for transport, and released it on July 28, 2022, for the purposes of the aliquot's further testing at an external laboratory for bupivacaine. These actions were completed per the Standard Operating Procedures in effect at that time (including revision 11, SOP 4860-Laboratory Referrals, and revision 17, SOP 4864-Toxicology Administrative Procedures). Ms. Rausch will testify that, during the span of these procedures, quality assurance protocols were rigorously observed.

Ms. Rausch's involvement in the testing procedures is documented in the Toxicology Analysis Test Report, the Toxicology Worksheet, the Chain of Custody Report, the Quality Control Summary, and the supporting documents under SWIFS case no. IFS-22-12341-0004.

Ms. Rausch has not testified as an expert at any trials or depositions in the last four years, but has testified as a fact witness in the last four years:

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| 4/18/2023 | IFS-21-24517 | Fact Witness | Criminal | State | Lakietle Evette Davis | CCC#11 | Dallas |
|-----------|--------------|--------------|----------|-------|-----------------------|--------|--------|

Her curriculum vitae has been attached to this filing as Exhibit F. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Rausch has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, her role in the preparation of blood samples for release from SWIFS.



Amanda Rausch

Brittany Welch, MS
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(214) 920-5900

Ms. Welch is a Toxicology Chemist III employed by the Southwestern Institute of Forensic Sciences (SWIFS) and has been since May 2013. Before that, Ms. Welch was employed as a Toxicology Chemist II from June 2009 to May 2013. In 2009, Ms. Welch was a graduate researcher at Sam Houston State University (SHSU). Ms. Welch obtained her undergraduate degree in biology from Texas A&M University in 2007 and a master's degree in forensic science from SHSU in 2009. She is currently licensed as a forensic analyst, toxicology (interpretive) by the Texas Forensic Science Commission and has been since 2018. Ms. Welch is a member of the Society of Forensic Toxicologists (since 2022) and the Southwestern Association of Toxicologists (since 2012). In 2012, Ms. Welch was awarded a meeting grant by the Southwestern Association of Toxicologists and conducted a presentation on the detection of bath salts to the Southwestern Association of Toxicologists. Since as early as 2010, Ms. Welch has regularly pursued and completed continuing education in her field, including attending courses and webinars conducted by Chromatography Online, the Texas Forensic Science Commission, the Society of Forensic Toxicologists (SOFT), RTI International's Center for Forensic Sciences, the Society of American Toxicologists, and the Center for Forensic Science Research and Education (CFSRE), as well as reviewing articles in *Journal of Analytical Toxicology*.

In her role as a Toxicology Chemist III at SWIFS, Ms. Welch performed the administrative review of SWIFS case files IFS-22-12341-0004, IFS-22-17256-0001, and IFS-23-17336-0001 and the associated data from the SWIFS Toxicology Laboratory. Ms. Welch authorized the Toxicology Analysis Test Reports in each case file, specifically, the analysis of blood samples recovered/taken from M.K., J.A., and K.P. As the administrative reviewer, Ms. Welch will testify that she reviewed each case file, the steps she took to do so, and the data received and provided in each case file. As the individual who signed the Toxicology Analysis Test Reports, Ms. Welch will testify that she authorized the Toxicology Analysis Test Reports for the forensic toxicology screenings performed concerning the blood samples taken from M.K., K.P., and J.A., including the procedures and steps undertaken to reach the results, findings, and conclusions from and for each screen.

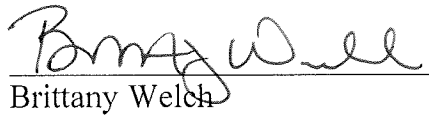
She will further testify that the LC-QTOF-MS/MS screening performed in each case file is a high-resolution mass spectrometry method that allows for the identification of a wide range of drugs and metabolites. She will testify that the chromatography separates any potential compounds of interest that may be present in a sample based on their interaction with a stationary phase, and the compounds are then bombarded with gas to cause fragmentation of the ions; fragments then enter the time-of-flight tube where the time taken for the fragment to travel the pathway allows for accurate mass identification.

She will further testify regarding the results of the toxicology reports, including that bupivacaine was detected in the blood sample from M.K.; lidocaine and ephedrine were detected in the blood sample from J.A.; and O-desmethyiltramadol, ephedrine, ondansetron, tramadol, lidocaine, gabapentin, and bupivacaine were detected in the blood sample taken from K.P.

Ms. Welch may testify to the general workflow of the SWIFS Toxicology Laboratory, as well as the Standard Operating Procedures (SOPs), including revisions 18 and 20, SOP 4861-QTOF Drug Screen, and revisions 15, 16, and 17, SOP 4864-Toxicology Administrative Procedures) in effect at the time of each screening. Ms. Welch will testify that her review determined that the various toxicology personnel followed and observed the SWIFS SOPs and quality control processes during the span of the screenings in each of the three case files.

[nothing further on this page]

Ms. Welch has testified as an expert at trials in the last four years; a list of the trials is attached as Exhibit H. Her curriculum vitae has been attached to this filing as Exhibit G. The government expects to demonstrate, by virtue of her education, continuing training, and experience, that Ms. Welch has specialized knowledge, skills, experience, training, and education in the field of forensic toxicology and the related testing of blood. Fed. R. Evid. 702(a). Further, the government expects to show that her specialized knowledge and skill will help the trier of fact understand the evidence—here, the testing of blood by SWIFS personnel using high resolution mass spectrometry and the results of that testing.


Brittany Welch

The government reserves the right to modify or supplement this Notice and will do so as necessary and as circumstances warrant, and with appropriate leave from this Court.

Respectfully submitted,

LEIGHA SIMONTON
UNITED STATES ATTORNEY

/s/ John J. de la Garza III

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Certificate of Service

I certify that a copy of this pleading was served on counsel for the defendant via ECF on February 15, 2024.

s/ John J. de la Garza III

John J. de la Garza III
Assistant United States Attorney